Amendments to the Specification:

Please replace the paragraph beginning on page 3, line 22 with the following amended paragraph:

The invention and other details of the invention will be described in more detail below with reference to an exemplary embodiment shown diagrammatically in the figure. The figure shows a diagram for wine production: the grapes, after harvest, are introduced into the harvest reception vessel 1, from which they are transported to a vessel 2 from which they are fed using a pump 3 via a connection line 4 to the press 5 or to a maceration vessel 23. The way of the grapes is determined by the position of the valves 20, 21 and 22. A plurality of temperature measuring points are installed on the transport path of the grapes and used to determine the respective grape temperature. The inlet temperature is measured by the measuring device 6 and sent to a programmable logic controller (PLC 28). This temperature is compared to a set point (desired temperature) and the amount of carbon dioxide to be fed through valve 12 is calculated by the PLC 28. The valve 12 is a regulation valve, its opening degree is driven by the PLC 28. The valves 18 and 19 are used to choose the line along which the grapes are transported, e.g. to the press 5 or to the maceration vessel 23. The temperature measuring devices 8 and 9 control the temperature after the injection of carbon dioxide. In case of a drop in temperature exceeding a predetermined interval ~~pretermined intervall~~, the injection of carbon dioxide is shut down by the PLC 28. This control function is very important to avoid

freezing of the transport pipes and lines, in case the grape flow is not at correct speed.

Please replace the paragraph beginning on page 4, line 13 with the following amended paragraph:

Carbon dioxide is fed from at least one reservoir 27 for carbon dioxide ~~(not shown)~~ via a line 10 which bears liquid carbon dioxide and has a pneumatic regulation valve 12, and a line 11 which bears gaseous carbon dioxide and has an electrically operated valve 13. If only one reservoir 27 is present, the line 11 is thus connected to the head space of the reservoir 27 where the carbon dioxide is present in the gaseous state, and the line 10 is disposed further down, so that via the line 10 liquid carbon dioxide can be taken from the reservoir 27. The two lines 10 and 11 are combined into one line 14. The line 14 has a safety valve 15. The carbon dioxide is apportioned between the lines 16 and 17 each of which has an electrically operated valve 18, 19. Opening the electrically operated valve 18 enables carbon dioxide to be introduced into the connection grapes transport line 24. Opening the electrically operated valve 19 enables carbon dioxide to be introduced into the connection line 25 bearing grapes. The valves 20, 21 and 22 represent diagrammatically the possibilities of feeding grapes into the press, the maceration vessel 23 and for further processing. The possibilities result from the potential combinations of the two valve settings (open or closed) for the valves 20, 21 and 22.

Please replace the paragraph beginning on page 4, line 39 with the following amended paragraph:

In the exemplary embodiment, the use of the programmable logic controller PLC 28 will also be described in more detail. Control points for this controller (PLC 28) are the harvest temperature (measured at the temperature measuring point 6), the grape sensor 7 which determines whether grapes are present in the vessel 2, the valve position of the valves 20, 21 and 22 and the temperature at the temperature measuring points 8 and 9. The controller (PLC 28) first compares the temperature value determined at the temperature measuring point 6 with a pre-set value. If grapes are present in the vessel 2, the pump 3 is started. At least one valve 21, 22 must be open, then the feed of carbon dioxide is also started. The injection line is chosen ~~choosen~~ by opening the valve 18 or 19. First the valve 13 (gaseous state) is open for a few seconds to rise the pressure and clean the injector inside the connection to the grapes transport pipe. Second the valve 12 (liquid state) is open gradually, the valve 13 is closed.

Please replace the paragraph beginning on page 5, line 23 with the following amended paragraph:

If the users choice is only to protect the grapes by an inert gas during transport, only the valves 18 or 19 and the valve 13 is opened ~~openend~~, in case all

conditions controlled by the PLC 28 are fulfilled. Carbon dioxide gas is injected during all transport time. The valve 12 stays in closed position.

Please replace the paragraph beginning on page 6, line 16 with the following amended paragraph:

The controller (PLC 28) is set in such a manner that the feed of carbon dioxide is stopped as soon as pump 3 is stopped or the valves 21/22 are closed or the temperature measured at 8 or 9 is too low.

Please replace the paragraph beginning on page 6, line 21 with the following amended paragraph:

When the feed of carbon dioxide is started, advantageously, at first for approximately 5 seconds only valve 13 is open (gaseous feed) while valve 12 remains closed. This prevents liquid carbon dioxide being injected at high pressure via a nozzle 26 into the connection line 24 and/or 25. After expiry of the 5 seconds, valve 12 is slowly opened up to the degree of opening pre-set by the controller (PLC 28).

Please replace the paragraph beginning on page 6, line 30 with the following amended paragraph:

The cooling effect is monitored via temperature measurements at the temperature measuring points 6, 8 and 9. If the temperature measured there falls below 7°C, the PLC 28 interrupts the feed of carbon dioxide. This reliably prevents freezing of the grapes or moisture freezing onto the connection lines.